D.P.U. 95-39

Application of Commonwealth Electric Company, pursuant to G.L. c. 164, § 94G(a), for approval by the Department of Public Utilities of the Company's annual performance program relating to fuel procurement and use.

APPEARANCE: Eric J. Krathwohl, Esq.

Rich, May, Bilodeau & Flaherty, P.C.

294 Washington Street Boston, MA 02108

-and-

John Cope-Flanagan, Esq.

COM/Energy Services Company

One Main Street

Cambridge, MA 02142

FOR: COMMONWEALTH ELECTRIC COMPANY

Petitioner

D.P.U. 95-39

I. <u>INTRODUCTION</u>

On April 3, 1995, pursuant to G.L. c. 164, § 94G(a), Commonwealth Electric Company ("Commonwealth" or "Company") filed a petition with the Department of Public Utilities ("Department"), requesting approval of proposed generating unit performance goals for the period July 1, 1995 through June 30, 1996. Section 94G(a) requires each electric company to file with the Department annual performance programs that provide for the efficient and cost-effective operation of its generating units. Each company's performance program must include proposed unit and system performance goals for availability factor ("AF"), equivalent availability factor ("EAF"), capacity factor ("CF"), forced outage rate ("FOR"), and heat rate ("HR"). The petition was docketed as D.P.U. 95-39.

Pursuant to notice duly issued, the Department conducted a hearing on the Company's petition on June 29, 1995.¹ In support of its petition, the Company sponsored the testimony of Richard W. Garlick, lead engineer for the Company. The evidentiary record includes seventeen exhibits and Company responses to five record requests and three post-hearing record requests.

II. THE COMPANY'S SUPPLY-SIDE PORTFOLIO

Under life-of-the-unit contracts, Commonwealth receives electric power from the West Tisbury (5.0 megawatts ("MW")) and Oak Bluffs (7.5 MW) diesel units; 20.0 percent (111.50 MW) of the output from Canal 1, a 557 MW fossil unit, and 22.9 percent (133.0 MW) from Canal 2, a 581 MW fossil unit, both owned and operated by the Company's

The public hearing was delayed in order to allow the Company the opportunity to consider whether to file an alternative incentive-type proposal for review in this proceeding. Ultimately, the Company opted not to do so.

affiliate, Canal Electric Company; 1.4 percent (8.9 MW) from Wyman 4, a 619.3 MW fossil unit, operated by Central Maine Power Company; 11.0 percent (73.7 MW) from Pilgrim, a 670 MW nuclear unit, owned and operated by Boston Edison Company; 2.8 percent (32.2 MW) from Seabrook, a 1150 MW nuclear unit, owned and operated by the New Hampshire Yankee Corporation (Exh. DPU-1-2; RR-DPU-3).²

In addition, a five-year power purchase contract between Canal Electric Company and Central Vermont Public Service Company entitles Commonwealth, through Canal Electric Company, to 7.0 percent (22.4 MW) from Merrimack 2, a 320 MW fossil unit owned and operated by Public Service Company of New Hampshire, and 4.8 percent (25.0 MW) from Vermont Yankee, a 521.8 MW nuclear unit, owned and operated by Vermont Yankee Nuclear Power Corporation (Exh. DPU-1-2; RR-DPU-3).

The remainder of the Company's supply purchases comes from small power producers, such as Boot Mills (20 MW), Chicopee Hydro (2.2 MW), Collins Hydro (1.3 MW), Ware Hydro (1.2 MW), Dartmouth Power (68.2 MW), and from power purchase contracts signed pursuant to 220 C.M.R. §§ 8.00 et seq., such as SEMASS RQF (46.2 MW), Northeast Energy Associates (53.4 MW), SEMASS Expansion (20.8 MW), Masspower (59.9 MW), and Altresco-Pittsfield (28.4 MW) (Exhs. DPU-1-9, 1-10; RR-DPU-3).

For the purpose of distinguishing those units that contribute most to system costs, performance programs identify major and minor units. Major units are units which contributed at

The airport diesel units, which previously provided 3.2 MW to the Company, were removed from the site on May 17, 1995 and therefore are no longer a generating source for the Company (Exh. DPU-1-10).

least five percent of the system generation (as measured in megawatthours) in any of the previous three years, or units in which the Company has at least a 100 MW entitlement. Any unit that does not qualify as a major unit is a minor unit. The Company's major units are Canal 1 and 2, Pilgrim, and Seabrook (Exh. CEC-2, § 4).

III. THE COMPANY'S PROPOSED GOALS

The Company proposed performance goals for Canal 1 and 2; West Tisbury diesels; Oak Bluffs diesels; Wyman 4; Pilgrim; and Seabrook (id. at § 6). Vermont Yankee and Merrimack 2 were not included in the Company's performance goals proposal since they are part of a contract which expires on October 31, 1995, and, which is therefore considered a short-term supply contract for this performance year (Exh. CEC-1, at 3-4; RR-DPU-3). The Company submitted proposed goals for its major and minor units that were calculated in a manner that was generally consistent with the methods approved in the Company's last performance program. See Commonwealth Electric Company, D.P.U. 94-65, at 3-5 (1994).

Under the Company's goals proposal, the EAF goals for major and minor units were set at values corresponding to each unit's Target Unit Availability ("TUA"), which are the availability targets that the New England Power Pool ("NEPOOL") sets for each member utility's units under its Performance Incentive Program (Exh. CEC-2, § 9). In developing its proposed goals, the Company used the TUAs approved by the New England Power Supply Planning Committee and adopted by the NEPOOL Executive Committee in the

April 21, 1993 revision, which became effective on May 1, 1993 (id.).

The Company calculated the remaining performance goals (i.e., AF, FOR, CF, and HR) in

accordance with the major unit method approved in previous proceedings, regardless of whether units met the major or minor unit criteria (<u>id.</u> at § 2).³ The Company also calculated system goals in a manner generally consistent with the method that has been approved by the Department in previous proceedings (<u>id.</u>).⁴

IV. ANALYSIS AND FINDINGS

The Department has reviewed the Company's goals proposal and finds that it includes all the units that should be included in the Company's generating unit performance program. The Department also finds that proposed goals for major and minor units were calculated in a manner consistent with the methods approved by the Department in D.P.U. 94-65.

In D.P.U. 94-65, the Department found that several advantages would result if goals were adopted based on NEPOOL TUAs: (1) the method would produce the same EAF goal for

AF goals were derived by adding to the EAF goal the ratio of average annual equivalent derated hours for the last three years to average annual period hours (Exh. CEC-2, § 2). CF goals for nuclear units were set equal to the EAF goal (<u>id.</u>). CF goals for fossil units were derived by multiplying the ratio of the three-year average CF to the three-year average EAF by the EAF goal (<u>id.</u>). FOR goals were derived by dividing projected FOH by the sum of projected FOH and SH (<u>id.</u>). Projected FOH were developed by dividing the three-year average FOH by the three-year average PH, then multiplying by the PH in the performance year (<u>id.</u>). Projected SH were developed by calculating the ratio of three-year average SH to three-year average AH and multiplying that ratio by the AF goal, then by PH in the performance year (<u>id.</u>). HR goals were set at the best (lowest) annual HR obtained during the previous three years (<u>id.</u>).

System goals for EAF, AF, CF, FOR, and HR were developed from the weighted averages of the goals for the individual units (Exh. CEC-2, § 2). The weighting factor for each unit was the ratio of unit to system generation as projected during the performance year (<u>id.</u>). Projected generation for each unit was calculated by multiplying each unit's capacity by its CF goal (<u>id.</u>). Projected system generation was calculated as the sum of projected unit generations across the system (<u>id.</u>). For the system HR goal calculation, the weighting factor for each fossil and nuclear unit was developed as a ratio of unit to system generation (<u>id.</u>).

generating units included in more than one company's supply portfolio; and (2) the method would reduce the time, effort, and expense incurred by a company in preparing goal-setting filings and by the Department in reviewing those filings.

In this proceeding, the Department reaffirms its findings in D.P.U. 94-65 and finds that the efficient and effective administration of the Company's performance program is best served by the goals proposal submitted by the Company in Exhibits CEC-2, DPU-1-2, DPU-1-9 and DPU-1-13, and record requests RR-DPU-3 and RR-DPU-4. The Department approves the goal-setting methods implicit in that proposal, and the resultant unit and system performance goals, as identified in Exhibits CEC-2, § 6, and DPU-1-13. The approved Company unit and system goals based on NEPOOL TUAs are identified in Table 1 attached to this Order.

The Department notes that EAF values that underlie the Company's presentation in its recent integrated resource plan ("IRP") filing (see Cambridge Electric Light Company's and Commonwealth's IRP filing in D.P.U. 95-95, Volume III at 1.4, 1.5), which suggest what can readily be achieved under base case planning conditions, may differ from the performance goals that the Company has proposed for its generating units in this goal-setting proceeding. While the Company's performance goals may exceed assessments of unit performance that are achieved on a routine basis and that are relevant to the resource planning process, it is not appropriate for the Department to establish as "goals" EAF values that are below levels that those units are expected to achieve. Rather, there should be a measure of consistency between the EAF values that are presented in goal-setting and resource planning proceedings.

The Department has stated that identification of the link between the EAF values used for

resource planning purposes and those used as performance targets would enhance the process of merging business planning and resource planning activities. Boston Edison Company, D.P.U. 94-49, at 59 (1994). Given such an approach, performance goals should be set at the greater of NEPOOL's TUA or the EAF levels that a company projects for resource planning purposes. The Department hereby puts the Company and other jurisdictional electric companies on notice that it plans to investigate this matter in future performance proceedings. Further, the Department anticipates that proposals that will introduce broad performance-based incentives for improved generating unit performance will be forthcoming, in keeping with the Department's Orders in Incentive Regulation, D.P.U. 94-158 (1994) and Industry Restructuring, D.P.U. 95-30 (1995).

V. ORDER

Accordingly, after due notice, hearing, and consideration, it is

ORDERED: That the generating unit and system performance goals for Commonwealth Electric Company for the period July 1, 1995 through June 30, 1996, shall be those contained in Table 1 attached to this Order; and it is

<u>FURTHER ORDERED</u>: That, as part of its next performance filing, the Company shall submit potential performance goals based on NEPOOL TUAs effective at that time or the EAF values the Company plans to rely on for resource planning purposes, whichever are greater, and shall comply with the requirements set forth in this Order; and it is

<u>FURTHER ORDERED</u>: That, pursuant to G.L. c. 164, § 94G and § 2.6(b) of the Department's guidelines for performance programs, dated December 8, 1981, the Company shall report on its progress under the annual performance program with each filing made pursuant to

D.P.U. 95-39

these guidelines; and it is

<u>FURTHER ORDERED</u>: That the Company shall file its next performance program goals by April 1, 1996, and the next performance period shall run from July 1, 1996, through June 30, 1997.

By Order of the Department,	
Kenneth Gordon, Chairman	
Tromical Cordon, Chamman	

Mary Clark Webster, Commissioner

Janet Gail Besser, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).